



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

LOCATION:
Idaho Falls, ID, US

ORGANIZATION:
Idaho National Laboratory

YEAR:
2011

ORGANIZATION URL:
<http://www.inl.gov>

STATUS:
Laureate

PROJECT NAME:
NEEDLE

CATEGORY:
Digital Access

PROJECT OVERVIEW

Needle is a federated search engine which enables our scientists and researchers to simultaneously search multiple sources through a single unified web-based interface. Needle has integrated the concepts of web, email, and knowledge repository findability; data federation; search algorithms; customization; facets; taxonomies; enriched web search tools; web indexing; Internet and Intranet integration and many other leading edge technologies into a single knowledge management search solution to address research and business objectives. Needle is a recipient of the 2010 IMC Technical Award. Needle's strength is the ability to search both corporate and external knowledge through one search interface. Industry has proven that every search should have two key factors – results and navigation. Needle provides relevant search results which are dynamically broken down into navigable topics, sources, and sites lists. The lists allow the user to easily navigate to the desired results as well as identify more targeted search terms. Needle's easy to use interface performs the consolidation of multiple activities that required significant time and resources in the past, freeing searchers to utilize the knowledge discovered. Needle not only searches titles and authors, but can search for and read text embedded in digitized images for those documents digitized and managed by the INL, e.g. the National Nuclear Archive documents stored as digitized. Needle is also used enterprise-wide as the search engine for the INL intranet web. portal

SOCIETAL BENEFITS

Needle provides the research community a seamless interface into assembling information from multiple sources, both corporate and external, increasing their ability to discover and use knowledge and augmenting their efficiency and effectiveness in executing their job duties.

PROJECT BENEFIT EXAMPLE

At Idaho National Laboratory (INL), the Pyroprocessing group and the Human Factors team use Needle to perform research in existing bodies of literary



knowledge and experimental data, while INL's Export Control group uses it to search previously released export control documentation to ensure optimized business processes. The INL Research & Development community uses the internal, external, and commercial sources, provided through Needle by the Research Library, to meet their information needs. John Sackett, a researcher involved in solving the current energy crisis is quoted "...in preparing the report for DOE, identifying gaps in our knowledge required to build the next fast reactor, I was able to locate scores of documents necessary for the effort that I would have otherwise not found. It is a great testament to Needle."

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

